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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,367	08/05/2003	Thomas Senn	97634.00175	6916

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MCCARTER & ENGLISH, LLP STAMFORD OFFICE
FINANCIAL CENTRE, SUITE 304A
695 EAST MAIN STREET
STAMFORD, CT 06901-2138

EXAMINER

HANG, VU B

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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08/14/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/634,367	Applicant(s) SENN, THOMAS	
	Examiner Vu B. Hang	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>08/05/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 6 and 9-14 are rejected under 35 U.S.C. 102(e) as being anticipated by Weichmann et al. (US Patent 6,580,524 B1).
3. Regarding **Claims 21 and 1**, Weichmann discloses a printing process involving two stages, a pre-printing stage and an edition printing stage which comprises in the pre-printing stage producing digital original image data which represent an original master (see Fig.4 (1,3,70) and Col.4, Line 17-30);

producing the digital printing data from the master image for the printing colors involved in the printing (see Col.4, Line 17-30);

transmitting the digital printing data to a print shop by way of a data channel (see Fig.4, Col.8, Line 6-23 and Col.8, Line 24-33);

producing the printing plates in the print shop using the digital printing data for use in the edition printing to be carried out in a printing machine (see Col.5, Line 54-54);

using for the color control of the printing machine test image data corresponding to the test image produced by an image wise colorimetric measurement of at least one edition printing sample using a spectral color measurement system (see Col.4, Line 17-30 and Col.4, Line 43-57);

transmitting the test image data thus produced in the print shop to the pre-printing stage through a data channel (see Fig.4, Col.8, Line 13-17 and Col.8, Line 24-33);

evaluating the test image data in the pre-printing stage for quality monitoring (see Col.7, Line 6-14);

transmitting the results of the quality monitoring from the pre-printing stage to the print shop through a data channel (see Col.7, Line 6-14, Col.8, Line 6-23 and Col.8, Line 24-33); and

using the in the printing shop the results of the quality monitoring transmitted from the pre-printing stage for at least one of the release of the edition printing and the control of the printing process (see Col.7, Line 6-14, Col.8, Line 6-23 and Col.8, Line 24-33).

4. Regarding **Claim 2**, Weichmann further discloses determining and then transmitting in the pre-printing stage measurement positions and nominal color values at these measurement positions through a data channel to the print shop (see Col.4, Line 43-57, Col.7, Line 6-14 and Col.8, Line 6-23), and using the nominal color values in the print shop for color control of the printing machine (see Col.7, Line 6-14).

5. Regarding **Claim 3**, Weichmann further discloses using a spectrally operating color measurement system for the image wise colorimetric measurement of the edition printing sample (see Col.4, Line 43-57), and wherein the test image data the pre-printing stage are spectral data which include for each measured point remission values for several different wavelength (see Col.4, Line 58 – Col.5, Line 3).

6. Regarding **Claim 6**, Weichmann further discloses the monitoring of color deviations between nominal color values and the corresponding color measurement values contained in the test image data (see Col.5, Line 61-64, Col.6, Line 41-47 and Col.7, Line 6-14).

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7. Regarding **Claim 9**, Weichmann further discloses transmitting the release for the edition printing to the print shop based on the quality monitoring conducted in the pre-printing stage (see Col.7, Line 6-14).

8. Regarding **Claim 10**, Weichmann further discloses transmitting the results of the quality monitoring conducted in the pre-printing stage based on desired color change or modified nominal color values to the print shop (see Col.7, Line 6-14).

9. Regarding **Claim 11**, Weichmann further discloses transmitting the results of the quality monitoring conducted in the pre-printing stage based on desired color change or concentration values for the colors involved in the printing to the print shop (see Col.7, Line 6-14).

10. Regarding **Claim 12**, Weichmann further discloses transmitting the results of the quality monitoring conducted in the pre-printing stage based on desired color change or formulations for the colors involved in the printing to the print shop (see Col.7, Line 6-14).

11. Regarding **Claim 13**, Weichmann further discloses transmitting the results of the quality monitoring conducted in the pre-printing stage based on desired color change or modified digital printing data to the print shop for use in the production of new printing plates in the print shop based on the digital print data (see Col.5, Line 45-54 and Col.7, Line 6-14), and using the printing plates for the edition printing (see Col.5, Line 45-54 and Col.7, Line 6-14).

12. Regarding **Claim 13**, Weichmann further discloses protocolling the print quality of the edition printing (see Col.8, line 24-33).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 5 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weichmann et al. (US Patent 6,580,524 B1) in view of Laverty et al. (US Patent 6,429,947 B1).

15. Regarding **Claim 5**, Weichmann discloses calculating a test image on the basis of a test image data transferred to the pre-printing stage (see Col.7, Line 6-14), but fails to disclose visually displaying the test image with a reference image on a screen for quality monitoring. Weichmann, however, teaches proofing the image data for quality assurance purposes (see Col.2, Line 26-33). Laverty teaches providing a display preview of a print product for customer approval (see Fig.1 and Col.2, Line 50-52) and passing a proof to a customer for approval (see Fig.1 and Col.6, Line 20-35).

16. Weichmann and Laverty are combinable because they are from the same field of endeavor, namely print processing systems. At the time of the invention, it would have been obvious for one skilled in the art include to the printing process of Claim 1 a means for visually displaying the test image with a reference image on a screen for quality monitoring. The motivation would be to provide a visual proofing means for ensuring customer satisfaction. The visual display of the test image with a reference image on a display screen would enable a customer the opportunity to approve the processed image data for printing.

17. Regarding **Claim 15**, the rationale provided for the rejection of Claim 5 is incorporated herein.

18. Regarding **Claim 16**, the rationale provided for the rejection of Claim 5 is incorporated herein.

19. Regarding **Claim 17**, the rationale provided for the rejection of Claim 5 is incorporated herein.

20. Regarding **Claim 18**, the rationale provided for the rejection of Claim 5 is incorporated herein.

21. Regarding **Claim 19**, Weichmann discloses image-wise measuring in the pre-printing stage the test print binding for quality evaluation using the spectral color measurement system (see Col.4, Line 43-57) but fails to disclose producing a screen display of the test print from the image data obtained, thereby using the screen display as a reference image for comparison with the test image. Weichmann, however, teaches proofing the image data for quality assurance purposes (see Col.2, Line 26-33). Lavery teaches providing a display preview of a print product for customer approval (see Fig.1 and Col.2, Line 50-52) and passing a proof to a customer for approval (see Fig.1 and Col.6, Line 20-35).

22. At the time of the invention, it would have been obvious for one skilled in the art include to the printing process of Claim 1 a means for producing a screen display of the test print from the image data obtained, thereby using the screen display as a reference image for comparison with the test image. The motivation would be to provide a visual proofing means for ensuring print satisfaction. The screen display displaying the test prints, would enable a print operator or customer the opportunity to visually monitor and approve the processed image data for printing.

23. Claims 7-8 rejected under 35 U.S.C. 103(a) as being unpatentable over Weichmann et al. (US Patent 6,580,524 B1) in view of Rasmussen et al. (US Patent 6,912,071 B1).

24. Regarding **Claim 7**, Weichmann discloses produces digital test print data from test image data transferred to the pre-printing stage (see Col.4, Line 17-30, Col.8, Line 13-17 and Col.8, Line 24-33) but fails to disclose producing a physical test print by way of the digital test print data, wherein the quality monitoring includes a visual comparison the test print with a reference image. Weichmann, however, teaches proofing the image data for quality assurance purposes (see Col.2, Line 26-33). Rasmussen discloses producing a physical test print by way of the digital test print data for visually monitoring the image quality of a print product (see Fig.6 and Col.9, Line 15-21).

25. Weichmann and Rasmussen are combinable because they are from the same field of endeavor, namely print processing systems. At the time of the invention, it would have been obvious for one skilled in the art include to the printing process of Claim 1 a means for producing a physical test print by way of the digital test print data and visually comparing the test print with a reference image. The motivation would be to provide a visual proofing means for ensuring print satisfaction. The printed physical test prints, along with a reference image would enable a print operator or customer the opportunity to visually monitor and approve the processed image data for printing.

26. Regarding **Claim 8**, Weichmann further discloses the reference image is a test print produced in the pre-printing stage using the digital print data (see Fig.6 and Col.9, Line 15-21).

27. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Weichmann et al. (US Patent 6,580,524 B1).

28. Regarding **Claim 20**, Weichmann discloses the printing process of Claim 1 but fails to expressly disclose the color measurement system is equipped with a goniometric measurement means, which allows illumination in different directions for the image capture. Weichmann, however, discloses a color measurement system that measures different area coverages and positions of the colors from the image capture (see Col.4, Line 43-57), and performing densitometric measurements for the colors in the image capture (see Col.4, Line 58 – Col.5, Line 3). At the time of the invention, it would have been obvious for one skilled in the art to include to the color measurement system a goniometric measurement means that allows illumination in different directions for the image capture. The motivation would be to perform the spectral data and densitometric measurements for the obtained image data to produce the test color image data. The spectral data and the density data of the captured image data are obtained through measuring the different angles of the colors in the image data, for which goniometric measurements can be applied.

Claim Rejections - 35 USC § 112

29. **Claim 4** recites the limitation "the wavelengths are 16 wavelengths in the range of 400 to 700nm with respective spacing of 20nm" in the printing process according to Claim 3. There is insufficient antecedent basis for this limitation in the claim. No such limitation can be found in applicant's specification. Further, no explanation can be found in the applicant's specification as to why it is necessary to include to the claimed invention wavelengths that are "16 wavelengths in the range of 400 to 700nm with respective spacing of 20nm".

30. **Claim 20** recites the limitation "Process according to Claim 21, wherein the color measurement system in the pre-printing stage and the print shop is equipped with a goniometric measurement geometry". There is insufficient antecedent basis for this limitation in the claim. Claim 21 does not recite "a color measurement system in the pre-printing stage".

Claim Objections

31. **Claim 1** is objected to because of the following informalities: Improper claim format. Claim 1 includes a preposition "In", which makes it a claim that is improper in format. Appropriate correction is required.

Conclusion

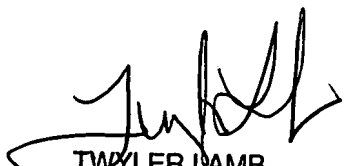
32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu B. Hang whose telephone number is (571) 272-0582. The examiner can normally be reached on Monday-Friday, 9:00am - 6:00pm.

33. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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34. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vu Hang
Assistant Examiner



TWYLER LAMB
SUPERVISORY PATENT EXAMINER